# **EXHIBIT 23**

# IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF OHIO EASTERN DIVISION

IN RE NATIONAL : MDL No. 2804

PRESCRIPTION OPIATE : CASE NO. 17-MD-2804

LITIGATION : (DAP)

:

EXPERT REPORT OF CRAIG J. MCCANN, PH.D., CFA March 25, 2019

can also refer to the amount by which a quanity of one in the transaction falls

#### 16. Transaction Date

short of or exceeds the standard size package of the NDC.<sup>19</sup>

47. Transaction Date is the date a shipment occurred, not the date an order was placed by the Buyer or received by the Seller or the date of some other activity.<sup>20</sup>

## 17. Calculated Base Weight in Grams

48. The Calculated Base Weight in Grams is the total active ingredient weight, in grams, of a drug in the reported transaction. The Calculated Base Weight in Grams in the ARCOS Data produced by the DEA was not reported by the Sellers. Rather, it was calculated by the DEA and appended (along with information about the Buyer and the Seller, the Drug Code, the Drug Name, and the Dosage Units) by the DEA before the data was produced. As explained in Appendix 2, I verify the Calculated Base Weight in Grams for each transaction using the NDC Dictionary.

### 18. Dosage Units

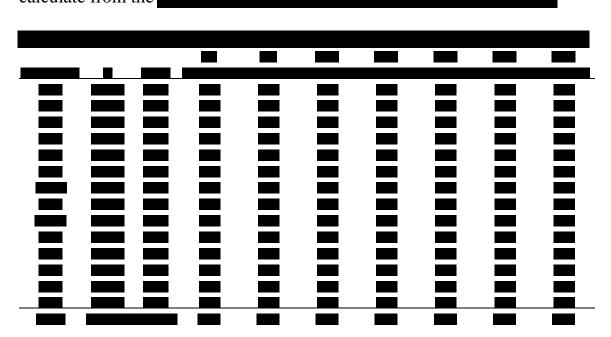
49. Dosage Units is the number of packages in the transaction, multiplied by the number of discrete individual drug products (e.g., pills, patches, lozenges) in each package. Dosage Unit is only populated if the drug product is delivered as a capsule, tablet, film, suppository, patch, lollipop, or lozenge. The Dosage Unit in the ARCOS Data was not reported by the Sellers. Rather, it was calculated by the DEA and appended by the DEA before the

<sup>&</sup>lt;sup>19</sup> ARCOS Handbook, §5.17, p. 5-43.

<sup>&</sup>lt;sup>20</sup> ARCOS Handbook, §5.15.1, p. 5-40.

weights within 1.0% of the weights I aggregate up from the processed ARCOS transaction data.

71. The RDSRs confirm the accuarcy of the ARCOS Data I received. The correlation between the RDSRs' reported drug weight and the weights I calculate from the



**B.** Defendants' Transaction Data

72. In addition to receiving the ARCOS Data produced by the DEA, I received transaction data produced in discovery by 13 Defendants.<sup>29</sup> I

<sup>&</sup>lt;sup>29</sup> The 13 Defendants are Anda, AmerisourceBergen, Cardinal Health, CVS, Discount Drug Mart, HBC, Henry Schein, H. D. Smith, McKesson, Prescription Supply, Rite Aid, Walgreens, and Walmart. I do not discuss the data produced by Rite Aid or Henry Schein because the produced data was insufficient to compare with the ARCOS Data. Rite Aid did not produce the Buyer's DEA numbers, and the data produced by Rite Aid does not identify which counties are included in the data. Henry Schein did not include the Buyer's DEA numbers or NDCs. Appendix 7 lists the data fields provided by each Defendant. I have standardized the names of the fields to simplify the presentation.

183. The ARCOS Data can be used to identify transactions into a state, county, zipcode or individual pharmacy meeting certain criteria as I have illustrated above.

Craig J. McCann, Ph.D., CFA